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***EASTERN REGION RIVER FORECAST CENTER (RFC) 24 HOUR OPERATIONS***

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March 24, 2004

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**1. Purpose.** The purpose of this Supplement is to define the criteria under which River Forecast Centers (RFCs) shall extend their operations to 24 hours per day and to define the additional operational requirements for Weather Forecast Offices (WFOs) and RFCs when this expansion of operations occurs.

**2. Background.** NWS Instruction 10-911 (River Forecast Center Operations) states that RFC Forecast Services will be provided nominally 16 hours per day and 7 days a week. RFCs will extend to 24-hour operations during widespread precipitation and flood situations.

**3. Criteria for Beginning, Continuing, or Ending RFC 24 Hour Operations.** General criteria for RFC extension to 24-hour operations are provided in Table A. Good judgement should also allow for exceptions to these general rules.

If WFOs have a concern that they will need assistance from the RFC(s) outside of normal RFC hours, they should contact the RFC to discuss the situation with them *prior* to RFC closing time, whenever possible. If the situation meets the criteria listed in Table A, the RFC should remain open.

RFCs should ensure that it is possible to contact a member of their staff when the office is closed. The use of pagers or providing home telephone numbers of the forecaster on duty are some methods.

The final decision of 24 hour RFC operations rests with either the HIC, designee or senior hydrologist in consultation with the MIC or lead forecaster at the WFO whose HSA is impacted.

Table A. General Criteria for 24 hour Coverage by RFCs

<b>Begin 24 hr Coverage</b>	<b>Continue 24 hr Coverage</b>	<b>End 24 Coverage</b>
One or more RFC forecast points are 1) expect to go above flood stage or 2) are already above flood stage and expected to rise. <b>(#1)</b>	One or more RFC forecast points are above flood stage and are expected to rise.	RFC forecast points have crested or at steady minor flooding levels and QPF or snow melt forecast are insufficient to return the river to a rising state. <b>(#3)</b>
Wide spread convective rainfall events when areal coverage will be sufficient to produce more than localized effects.	Major flooding is occurring at any RFC forecast point. <b>(#2)</b>	No major flooding should be occurring at any RFC forecast point. <b>(#2)</b>
WFO requests support during significant flood forecast and warning operations.	The decision for continued 24 hour RFC support should be reached through coordination between the RFC and WFO.	The decision for ending 24 hour RFC support should be reached through coordination between the RFC and WFO.

**(#1)** This criteria should not apply to slower rising rivers that would take several days to crest, but is intended to cover the overnight period when the RFC is normally closed.

**(#2)** Major flooding includes: "Extensive inundation and damage - many primary roads and bridges closed - many people may be evacuated." (See NWS Manual 10-950, "Definitions and General Terminology" .

**(#3)** For example, during spring snow melt flooding conditions, some rivers may rise to minor flooding levels and stay there for 5-6 weeks. In this situation, close monitoring is required since small amounts of rain may be sufficient to turn the situation around, but not necessarily on a 24 hour basis.

4. **RFC and WFO Activities/Procedures Required During 24 Hour Operations.** Some additional RFC and WFO operational activities are required when RFC operations extend to 24 hours. A general list of these activities is provided in Table B.

Table B. RFC and WFO Activities when RFC Operations Extend to 24 Hours

<b>RFC OPERATIONS (#1)</b>	<b>WFO OPERATIONS</b>
HAS function should issue HCM concerning to 1) notify HSAs, adjacent RFCs and ERH of the extension to 24 hour operations, and 2) coordinate data requirements <b>(#2)</b>	WFOs should ensure that HCM messages for all servicing RFCs are alarmed at an operational AWIPS workstation, and are monitored for content.
RFCs should monitor hydrometeorological observations. Additionally, RFCs should monitor WFO hydrologic products (ESF, FFA, FFW, FFS, FLW, FLS, and RVS).	Whenever rivers are above flood stage and expected to rise, WFOs should transmit a complete quality controlled, SHEF-encoded dataset for updating river forecasts at a minimum of every 6 hours. During ice breakup or movement of ice, river ice reports should also be provided.
HAS function should support and monitor WSR-88D products and multi-sensor precipitation estimates, as well as issue HMDs, HCMs, and QPFs, when appropriate.	WFOs should monitor WSR-88D products and make adjustments to precipitation algorithm thresholds as necessary to support flood warning and forecast operations.
RFCs should make contingency forecast runs that are based on generalized rainfall amounts in order to determine the effect of expected rainfall amounts. Results of contingency runs should be communicated to the HSA by use of the HCM or ESG.	WFOs should examine results of RFC contingency forecast runs and contact the RFC with any questions or concerns.
RFCs should update river forecast guidance based on the hydrologic situations and on the requirements of the WFO/RFC. RFC forecasters should provide coordination and guidance to the WFOs.	WFOs should monitor RFC products and compare observed versus forecast values. WFOs should update hydrologic watch and warning products when the RFCs provide updated guidance.

**(#1)** Whenever the RFC is operating 24 hours a day, the HAS function and the Hydrologic Forecast function should both be operating.

**(#2)** The Hydrometeorological Coordination Message (HCM) will describe the reasons in a similar fashion to the area forecast discussion (AFD). The HCM should be updated regularly to provide updated status of rivers and forecasts according to procedures outlined in ER Supplement, "WFO/RFC/HPC Hydrometeorology Coordination".